

3 MONTHS

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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--------------------------|---------------------------------|----------------------|---------------------|------------------|
| 10/539,256 | 06/16/2005 | Matthias Wiesner | 613242000800 | 2422 |
| | 7590 04/19/2007 FOERSTER LLP | | EXAMINER | |
| 12531 HIGH B | | | YOUNG, SHAWQUIA | |
| SUITE 100 | ^ 92130-2040 | | ART UNIT | PAPER NUMBER |
| SAN DIEGO, CA 92130-2040 | | | 1626 | |
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| SHORTENED STATUTOR | Y PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE | |
| 3 MONTHS | | 04/19/2007 | PAPER | |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| | | Application No. | Applicant(s) | | | |
|--|---|-------------------------------------|-----------------|--|--|--|
| Office Action Summary | | 10/539,256 | WIESNER ET AL. | | | |
| | | Examiner | Art Unit | | | |
| | 1 | Shawquia Young | 1626 | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | |
| Status | | | | | | |
| 1) | Responsive to communication(s) filed on <u>22 January 2007</u> . | | | | | |
| | his action is FINAL . 2b) This action is non-final. | | | | | |
| | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | |
| , | closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | |
| Disposition of Claims | | | | | | |
| 4)🖂 | Claim(s) 1-11 and 13-24 is/are pending in the | application. | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | |
| 5) | Claim(s) is/are allowed. | | | | | |
| 6)⊠ Claim(s) <u>1,3-9,11,19,20,23 and 24</u> is/are rejected. | | | | | | |
| 7)🖂 | 7) Claim(s) <u>2, 10, 13-18 and 22</u> is/are objected to. | | | | | |
| 8) Claim(s) are subject to restriction and/or election requirement. | | | | | | |
| Applicati | on Papers | | | | | |
| 9)[| The specification is objected to by the Examine | r. | | | | |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. | | | | | | |
| | Applicant may not request that any objection to the | drawing(s) be held in abeyance. See | 37 CFR 1.85(a). | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | |
| Priority u | nder 35 U.S.C. § 119 | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| | | | | | | |
| Attachment(s) | | | | | | |
| | 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date | | | | | |
| 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 5) Notice of Informal Patent Application 6) Other: | | | | | | |

DETAILED ACTION

Claims 1-11 and 13-24 are currently pending in the instant application.

In response to the Non-final rejection office action mailed on November 30, 2006,

Applicants cancelled claim 12.

I. Information Disclosure Statement (IDS)

Applicants have stated that the reference EP 0569802 is the EP equivalent of U.S. Patent No. 5,532,266 previously submitted on June 16, 2005. The Examiner has considered the above reference.

II. Response to Arguments

Applicant's arguments, filed January 22, 2007 with respect to the rejection of claims 1, 3-9, 11, 19, 20, 23 and 24 under 35 USC 112, 1st paragraph, written description; the rejection of claims 19 and 21 under 35 USC 112, 1st paragraph, enablement; the rejection of claims 1, 3-9, 11, 19, 20, 23 and 24 under 35 USC 112, 2nd paragraph, being indefinite; the rejection of claim 19 under 35 USC 112, 2nd paragraph, omitting essential steps have been fully considered and are partially persuasive. The rejection of claims 1, 3-9, 11, 19, 20 and 23 under 35 USC 112, 1st paragraph on the basis of written description, the rejection of claims 19 and 21 under 35 USC 112, 1st paragraph on the basis of omitting essential steps have been withdrawn.

Applicants traverse the rejection of claims 19 and 21 under 112, 1st paragraph on the basis of enablement and argue that the Examiner misinterprets the scope of claims

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19 and 21. Applicants further state that claims 19 and 21 refer to a method and pharmaceutical composition wherein one or more derivative compounds of claim 1 is mixed with one or more compounds with known pharmacological activity. The pharmacological effects of the derivative compound(s) and the additional active ingredients(s) may be related to or completely independent of each other. The Examiner points out that applicants might be enabled for pharmaceutical active ingredients such as appetite suppressants, vitamins, diuretics or antiphlogistics but are not enabled for all other classes of pharmaceutical active ingredients. This argument is discussed in more detail below.

Applicants also traverse the rejection of claims 1, 3-9, 11, 19, 20, 23 and 24 under 35 USC 112, second paragraph on the basis of being indefinite. Applicants argue that the term "derivative" need not be defined in the claims to satisfy the standard of definiteness under 35 USC 112, 2nd paragraph. Applicants further state that according to the Federal Circuit held in *Orthokinetics*, the definiteness of a patent claim depends on whether one skilled in the art would understand the bounds of the claims when read "in light of the specification". Applicants argue that the term "derivative" has a clear definition in the chemical art. According to Merriam-Webster Dictionary, "derivative" is defined as a chemical substance related structurally to another substance and theoretically derivable from it" or "a substance that can be made from another substance". However, the Examiner wants to point out that the term derivative can read on compounds that are structurally related to the compound N-methyl-N-[(1S)-1-phenyl-2-((3S)-3-hydroxy-pyrrolidin-1-yl)ethyl]-2,2-diphenylacetamide and these derivatives can

contain at least one covalently bonded acid. It is unclear to the Examiner whether the term "derivatives" only refers to varying what type of acid is being covalently bonded to the hydroxyl group attached to the pyrrolidinyl ring or does it include, for example, varying functional groups substituted on any of the various phenyl groups within the core structure of the above compound. Therefore, the claim is considered indefinite.

The rejection of claims 1, 3-9, 11, 19, 20, 23 and 24 under 35 USC 112, 2nd paragraph, on the basis of being indefinite has been maintained. However, upon further consideration, a new ground(s) of rejection is made in view of claims 19 and 21 under 35 USC 112, 1st paragraph, scope of enablement.

III. Rejection(s)

Claim Rejections - 35 USC § 112, 1st paragraph

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 19 and 21 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a pharmaceutical composition comprising one or more derivatives according to claim 1, and one or more further compounds selected from excipients, adjuvants and pharmaceutical active ingredients such as appetite suppressants, vitamins, diuretics and antiphlogistics does not reasonably provide enablement for any pharmaceutical active ingredient. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly

connected, to make the invention commensurate in scope with these claims.

As stated in the MPEP 2164.01 (a), "There are many factors to be considered when determining whether there is sufficient evidence to support a determination that a disclosure does not satisfy the enablement requirement and whether any necessary experimentation is "undue."

In *In re Wands*, 8 USPQ2d 1400 (1988), factors to be considered in determining whether a disclosure meets the enablement requirement of 35 U.S.C. 112, first paragraph, have need described. They are:

- 1. the nature of the invention,
- 2. the state of the prior art,
- 3. the predictability or lack thereof in the art,
- 4. the amount of direction or guidance present,
- 5. the presence or absence of working examples,
- 6. the breadth of the claims,
- 7. the quantity of experimentation needed, and
- 8. the level of the skill in the art.

In the instant case

The nature of the invention

The nature of the invention is a process for preparing a pharmaceutical composition with at least one product of claim 1 and at least one further compound selected from excipients, adjuvants and pharmaceutical active ingredients.

The state of the prior art and the predictability or lack thereof in the art

It is the state of the prior art that the term "pharmaceutical active ingredients" found in the claims is defined as the substance in a drug that is pharmaceutically active.

A dosage form of a drug is traditionally composed of two things: the active ingredient and excipient, which is the substance of the tablet, or the liquid the active ingredient is

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suspended in.

(<URL:http://en.wikipedia.org/wiki/Active_pharmaceutical_ingredients>.)

For example, the pharmaceutical active ingredients could be selected from the following: antacids, beta-receptor blocker, ACE Inhibitor, antidepressant, NSAIDS, antibiotics, etc.

There is no absolute predictability even in view of the seemingly high level of skill in the art. The existence of these obstacles establishes that the contemporary knowledge in the art would prevent one of ordinary skill in the art from accepting any therapeutic regimen on its face.

It is noted that the pharmaceutical art is unpredictable, requiring each embodiment to be individually assessed for physiological activity. In re Fisher, 427 F.2d 833, 166 USPQ 18 (CCPA 1970) indicates that the more unpredictable an area is, the more specific enablement is necessary in order to satisfy the statute. In the instant case, the instant claimed invention is highly unpredictable since one skilled in the art would recognize that in regards to pharmaceutical compositions comprising multiple active agents, one would need to consider drug-drug interactions.

As found in Drugs of Today 39(5), 2003, 301-38, Obach discloses that in regards to any given pharmacokinetic drug-drug interaction, the two drugs involved can be considered as either the "perpetrator" drug or the "victim" drug. The perpetrator is the drug that affects the activity of an enzyme of protein involved in the metabolism or disposition of the victim drug. The victim drug is the one that either causes side-effects or toxicity due to increased exposure, or lack of efficacy due to exposure decreased to

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below that required for therapeutic effect (page 302). There are varying mechanisms of drug interactions such as the reduction in the rate of the metabolism of one drug by another, the irreversible inactivation of drug-metabolizing enzymes and the exposure to the victim drug is decreased (pages 303-304). Obach also discloses that there are a number of in vitro and in vivo experimental approaches to be taken to determine drug-drug interactions (page 304).

The amount of direction or guidance present and the presence or absence of working examples

The only direction or guidance present in the instant specification is minimal. The specification is unclear to what pharmaceutical active ingredients applicant considers suitable to use in preparation of the pharmaceutical composition containing at least one product of claim 1. Pharmaceutical active ingredients are not defined clearly in the specification. The only examples of pharmaceutical active ingredients are listed on page 46, line 7 and page 47, lines 1-2, such as appetite suppressants, vitamins, diuretics or antiphlogistics. There are no working examples present for the use of a specific pharmaceutical active ingredient.

The breadth of the claims

The breadth of the claims is a process for preparing a pharmaceutical composition with at least one product of claim 1 and at least one further compound selected from excipients, adjuvants and pharmaceutical active ingredients.

The quantity of experimentation needed and the level of the skill in the art

The nature of the pharmaceutical arts is that it involves screening <u>in vitro</u> and <u>in vivo</u> to determine which compounds exhibit the desired pharmacological activities for each of the diseases and disorders instantly claimed. The quantity of experimentation needed would be undue when faced with the lack of direction and guidance present in the instant specification in regards to preparing pharmaceutical compositions with all pharmaceutical active ingredients generically embraced in the claim language, and when faced with the unpredictability of the pharmaceutical art. Thus, factors such as "sufficient working examples", "the level of skill in the art" and predictability, etc. have been demonstrated to be sufficiently lacking in the instant case for the instant method claims.

Even though the level of skill in the pharmaceutical art is very high, based on the unpredictable nature of the invention and state of the prior art and lack of guidance and direction, one skilled in the art could not use the claimed invention without undue experimentation.

Claim Rejections - 35 USC § 112, 2nd paragraph

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 3-9, 11, 19, 20 and 23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the

subject matter which applicant regards as the invention. Claims 1, 3-9, 11, 19, 20 and 23 are indefinite for the reasons set forth above under 35 U.S.C. 112, first paragraph. Claims 1, 3-9, 11, 19, 20 and 23 are drawn to the derivatives of compounds in Claim 1. However, the "derivative" of the compounds of Claims 1, 3-9, 11, 19, 20 and 23 are not defined in the claims so as to know the metes and bounds of the claims. Therefore, the claims are indefinite. To overcome this rejection, applicants are suggested to delete the term "derivative".

IV. Objections

Dependent Claim Objections

Dependent Claims 2, 10, 13-18 and 22 are also objected to as being dependent upon a rejected based claim. To overcome this objection, Applicant should rewrite said claims in an independent form and include the limitations of the base claim and any intervening claim.

V. Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shawquia Young whose telephone number is 571-272-9043. The examiner can normally be reached on 7:00 AM-3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph McKane can be reached on 571-272-0699. The fax phone number . for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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